UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,337	04/15/2004	Baha T. Tanju	1600-09700	8644

45933 7590 08/11/2009

CONLEY ROSE, P.C.
600 TRAVIS
SUITE 7100
HOUSTON, TX 77002

EXAMINER	
MAHMOUDZADEH, NIMA	

ART UNIT	PAPER NUMBER
2419	

MAIL DATE	DELIVERY MODE
08/11/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/825,337	TANJU, BAHA T.	
	Examiner	Art Unit	
	NIMA MAHMOUDZADEH	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 April 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21 and 24-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *7,15-17 and 27* is/are allowed.

6)☒ Claim(s) *1-4, 10-14, 18-21, 24-26, and 28* is/are rejected.

7)☒ Claim(s) *5, 6, 8, and 9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on 04/30/2009 has been entered. Claim 1-21, and 24-28 are still pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 10-14 and 18-21 is rejected under 35 U.S.C. 102(e) as being anticipated by Raman et al. (US Patent No. 6,910,078).

Regarding claim 1, Raman et al. teach a system, comprising:

a first master device generating a first data stream (Fig. 1, element 120 generating 170-A stream data);

a second master device generating a second data stream (Fig. 1, element 122 generating 170-B new stream data), the first and second master devices being independent (Fig. 1);

a redundancy manager coupled to the first and second master devices (Fig. 1, element 110); and

a slave device coupled to the redundancy manager (Fig. 1, element 130 connected to the element 110 through network 105),

wherein the redundancy manager is operable to receive the first data stream from the first master device (Fig. 1, 170-A stream data received by the element 110) and the second data stream from the second master device (Fig. 1, 170-B stream data received by element 110), and

wherein the redundancy manager is operable to selectively forward one of the first and second data streams to the slave device (Fig. 1 and Fig. 3. Column 15, lines 33-39).

Regarding claim 2, Raman et al. teach the system of claim 1 wherein the first and second master devices comprise computers that are not configured to share data associated with the slave device directly with each other (Column 10, lines 1-29 discloses the selection that is done in the selector and based on the information such as timing or position provided to the selector. Also, servers are computers as well).

Regarding claim 3, Raman et al. teach the system of claim 1 wherein the first and second master devices are in different locations such that a user having access to the first master device is not able to simultaneously access the second master device and vice versa (Column 1, lines 6-30 discloses a user having access the streaming servers and according to column 10, lines 1-29, the access is granted to one of the servers before the Second server can get access. Also, according to Fig. 1, the servers are separate from each other and can be located in different location).

Regarding claim 10, Raman et al. teach a redundancy manager device for providing redundant data communication to a slave device, the redundancy manager device comprising:

a first processor (Fig. 3, element 150); and

a switching mechanism coupled to the first processor (Fig. 3, element 157),

wherein the switching mechanism is configured to receive a first data stream associated with a first master device and a second data stream associated with a second master device (Fig. 3, link 111 provides the first and the second stream to element 150 and element 157),

wherein the switching mechanism is configured to implement a default configuration that forwards one of the first and second data streams to the slave device (Column 15, lines 33-39),

wherein the first processor is configured to provide a switch control signal that causes the switching mechanism to switch between forwarding the first data stream and forwarding the second data stream (Claim 15),

wherein the first processor asserts and de-asserts the switch control signal in response to a determination of first and second data stream integrity and mastership transfer commands associated with the first and second master devices (Column 16, lines 33-54 discloses updating the stream based on the adjustment which can be interpreted as asserting and de-asserting).

Regarding claim 11, Raman et al. teach the redundancy manager device of claim 10 further comprising a second processor (Fig. 3, element 112), wherein the

second processor is configured to determine the second data stream integrity (Column 13, lines 9-19 and also, see Fig. 2) and assert a health signal to the first processor when the second data stream is invalid (Column 13, lines 9-19 the inherent signal is sent to the processor indicating the integrity of the second data stream, and also, column 12, lines 2-18 discloses the heartbeat signal. see Fig. 2).

Regarding claim 12, Raman et al. teach the redundancy manager device of claim 11 wherein the second processor (Fig. 3, element 112) is further configured to assert a first mastership transfer signal to the first processor in response to a mastership transfer command associated with transferring mastership from the first master device to the second master device (Column 7, lines 53-60, column13, lines 38-67 and column 14, lines 1-17).

Regarding claim 13, Raman et al. teach the redundancy manager device of claim 12 wherein the second processor is further configured to assert a second mastership transfer signal to the first processor in response to a mastership transfer command associated with transferring mastership from the second master device to the first master device (Column 13, lines 9-19 the inherent signal is sent to the processor indicating the integrity of the second data stream, and also, see Fig. 2).

Regarding claim 14, Raman et al. teach the redundancy manager device of claim 13 wherein the first processor is configured to determine if the first data stream is invalid and to periodically determine an assertion state of the health signal, first mastership transfer signal, and the second mastership transfer signal (Column 12, lines 2-18 discloses the heartbeat signal).

Regarding claim 18, (currently amended) Raman et al. teach a method performed by a redundancy manager device, comprising:

receiving a plurality of data streams, each data stream being received from a different master device (Fig. 3, element 130 receives First and Second stream of data. Data stream 170-A and 170-B); and

forwarding one of the data streams to a slave device according to a prioritization of data stream validity estimates (Fig. 3, element 110 forwards the stream to element 130 based on the validity), requests to forward a particular data stream (Fig. 3, element 110 forwards the particular stream to element 130 based on the validity), and a switch-based timing threshold (Column 6, lines 13-32).

Regarding claim 19, Raman et al. teach the method of claim 18 further comprising cycling between forwarding the data streams if a determination is made that none of the data streams are valid (Column 13, lines 9-18 discloses a cycle of the both data streams are not valid).

Regarding claim 20, Raman et al. teach the method of claim 19 further comprising detecting when a data stream becomes valid and setting a relay to forward the valid data stream (Column 13, lines 9-18 discloses a cycle of the both data streams are not valid and when a server is capable of serving data stream).

Regarding claim 21, Raman et al. teach the method of claim 20 further comprising upon receiving a request to forward a particular data stream determining if the particular data stream is associated with a healthy master device (Column 12, lines 2-18 discloses the heartbeat signal. Also, Column 13, lines 9-19).

Claim 22, (cancelled)

Claim 23, (cancelled)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raman et al. in view of Fontana et al. (US Patent No. 6,116,345).

Regarding claim 4, Raman et al. teach the system of claim 1, but fail to teach the system wherein the slave device comprises a subsea tool. However, Fontana et al. teach the system wherein the slave device comprises a subsea tool (Column 9, lines 28-30 and also, Fig. 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Raman et al. to include the subsea mechanism taught by Fontana et al. in order to communicate with the subsea level slave device and exchange information from bottom of the sea.

Regarding claim 24, (currently amended) Raman et al. teach a system, comprising:

a first master device (Fig. 1, element 120 generating 170-A stream data);

a second master device (Fig. 1, element 122 generating 170-B new stream data);

means for controlling (Fig. 3, element 150) coupled to means for switching mastership (Fig. 3, element 157), wherein the means for controlling asserts and de-asserts a signal to control the means for switching mastership based on requests originating from an active master device and requests originating from an idle master device (Column 16, lines 33-54 discloses updating the stream based on the adjustment which can be interpreted as asserting and de-asserting); and

means for switching mastership of the slave device between the master devices (Fig. 3, element 110 switches between master devices),

the slave device responsive to commands received from the first and second master devices (Column 7, lines 53-60, column13, lines 38-67 and column 14, lines 1-17), but fail to teach the slave device as a subsea tool.

However, Fontana et al. teach the slave device as a subsea tool (Column 9, lines 28-30 and also, Fig. 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Raman et al. to include the subsea mechanism taught by Fontana et al. in order to communicate with the subsea level slave device and exchange information from bottom of the sea.

Regarding claim 25, Raman et al. teach in view of Fontana et al. teach the system of claim 24 Raman et al. further teach the system wherein the means for controlling further controls the means for switching mastership based on a validity estimation of the data streams from the first and second master devices and timing considerations (Column 10, lines 1-29 discloses the selection that is done in the

selector and based on the information such as timing or position provided to the selector. Also, servers are computers as well).

Regarding claim 26, Raman et al. teach in view of Fontana et al. teach the system of claim 24 Raman et al. further teach the system wherein the first and second master devices are configured to send requests to transfer mastership in response to user input and at least one of data content received from the slave device (Fig. 3, requests 180 and also see column 14, lines 31-67 and column 15, lines 31-45) and a lack of data received from the subsea tool, and Fontana et al. further teach the slave device that as the subsea tool (Column 9, lines 28-30 and also, Fig. 7).

6. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raman et al. teach in view of Keck et al. (US Patent Publication No. 2002/0101888) and further in view of Fontana et al. (US Patent No. 6,116,345).

Regarding claim 28, Raman et al. teach the system of claim 1 but fail to teach the system wherein both of the first and second master devices are configured to simultaneously monitor a data stream from the subsea tool. However, Keck et al. teach the system wherein both of the first and second master devices are configured to simultaneously monitor a data stream from the device (Paragraph [0038]) but fail to teach that the device is a subsea tool. However, Fontana et al. teach the device as a subsea tool (Column 9, lines 28-30 and also, Fig. 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Raman et al. to include the

monitoring feature for the stream servers taught by Keck et al. in order to increase the quality of service and reduce delays in the communication system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Raman et al. in view of Keck et al. to include the subsea mechanism taught by Fontana et al. in order to communicate with the subsea level slave device and exchange information from bottom of the sea.

Allowable Subject Matter

7. Claims 5, 6, 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 7, 15, 16, 17, and 27 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior arts on the record fail to teach a system wherein the timing considerations prevent switching back and forth between forwarding the first data stream and the second data stream if less than a threshold amount of time has passed; and a redundancy manager wherein the first processor is configured to periodically assert a reset signal to the second processor whereby the second processor resets the health signal, the first mastership transfer signal, and the second mastership transfer signal, in combination with other limitation disclosed in the respective claims.

Response to Arguments

9. Applicant's arguments filed 04/30/2009 have been fully considered but they are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., On page 9 and 10 of the applicant's response, the statement "clients are master devices that **issue requests** and servers are slave devices that respond to the requests from the clients" of claims1, 10 and 18) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On page 11 of applicant's response, the Applicant argued that the prior art of the record fail to teach "a subsea tool" of claim 24. The Examiner respectfully disagrees. As shown in Fig. 2 and Fig. 7, a sub-sea tool is in communication with a floating device in the surface. As seen on Fig. 2, element 101 is the floating device that contains a control unit of 170 in communication with the sub-sea device. Rejections for the remainder of the rejected claims are maintained by the Examiner.

.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIMA MAHMOUDZADEH whose telephone number is (571)270-3527. The examiner can normally be reached on Monday - Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chirag G. Shah can be reached on (571) 272-3144. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NIMA MAHMOUDZADEH/
Examiner, Art Unit 2419

/Chirag G Shah/
Supervisory Patent Examiner, Art Unit 2419